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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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11/20/2001

Vasco Vollmer

10191/1963

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EXAMINER

BATES, KEVIN T

ART UNIT

PAPER NUMBER

2155

DATE MAILED: 04/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/913,484

Applicant(s)

VOLLMER ET AL

Examiner

Kevin Bates

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Amendment***

This Office Action is in response to a communication made on March 20, 2006.

Claims 13 – 25 are pending in the application.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 13 – 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Ketcham (6721334).**

**Regarding claim 13**, Ketcham teaches a method of effective utilization of data packets of differing capacity, comprising:

exchanging user data packets and control data packets (Figure 1, element 124) between a master station and subscribers, the user data packets having a data capacity which is a multiple of a data capacity of the control data packets (Column 2, lines 62 – 67, where there are packets and they can be multiply fit into a maximum packet size; Column 10, lines 1 – 4, an Nth multiple);

filling at least some containers for the user data packets each with a plurality of control data packets in a transmission frame (Column 2, lines 61 – 67) according to an

agreement between the master station and at least one of the subscribers (Column 3, lines 14 – 21), the agreement stipulating which of the containers for the user data packets are filled with control data packets, the control data packets which are stored in the containers for the user data packets being combined in a sub-frame, an external format of the sub-frame being adapted to a format of the user data packets (Column 3, lines 1 – 6); and

transferring the user data packets and the control data packets between the master station and the subscribers in a communications system having frame-oriented transmission (Column 7, lines 53 – 61).

**Regarding claim 14**, Ketcham teaches the method according to claim 13, further comprising: announcing the agreement by transmitting an announcement in a control data packet in advance of transferring the containers for the user data packets filled with control data packets (Column 3, lines 14 – 21).

**Regarding claim 15**, Ketcham teaches the method according to claim 13, further comprising: announcing the agreement using an announcement in a header field of the containers for the user data packet filled with control data packets (Column 3, lines 1 – 6).

**Regarding claim 16**, Ketcham teaches the method according to claim 13, further comprising: making the agreement by transmitting a request signal from the at least one of the subscribers to the master station (Column 3, lines 14 – 21).

**Regarding claim 17**, Ketcham teaches the method according to claim 13, further comprising: assigning to one of the subscribers by the master station a container for

user data packets for transmission of control data packets after a predetermined number of requests for control data packets by the one of the subscribers (Column 9, lines 40 – 51; Column 3, lines 17 – 19; where the response packet tells the system to send aggregate packets).

**Regarding claim 18**, Ketcham teaches the method according to claim 13, further comprising: transmitting information regarding at least one of a type and a content of subsequent containers for user data packets filled with control data packets using at least a portion of a control data packet (Column 3, lines 1 – 6).

**Regarding claim 19**, Ketcham teaches the method according to claim 18, further comprising: storing an information element in the at least the part of the control data packet, the information element containing information about a number of occupied fields for control data packets within a subsequent container for user data packets (Column 3, lines 1 – 6).

**Regarding claim 20**, Ketcham teaches the method according to claim 13, further comprising: indicating information regarding a position of one of the containers for user data packets which is filled with control data packets within a block of user data packets using at least a portion of a control data packet (Column 3, lines 1 – 6).

**Regarding claim 21**, Ketcham teaches the method according to claim 13, further comprising: arranging each of the containers for user data packets which is filled with control data packets in a predetermined position within a respective block of cohesive user data packets (Column 7, lines 53 – 59, where the system is designed to identify

packets which can be aggregated and sends them before packets which are too large to be aggregated).

**Regarding claim 22**, Ketcham teaches the method according to claim 21, wherein each of the containers for the user data packets which are filled with control data packets is arranged at a beginning of the respective block of cohesive user data packets (Column 7, lines 53 – 59, where the system is designed to identify packets which can be aggregated and sends them before packets which are too large to be aggregated).

**Regarding claim 23**, Ketcham teaches the method according to claim 13, further comprising: storing an information element in a preceding control data packet for each container for user data packets which is filled with control data packets (Column 3, lines 1 – 6, where in the aggregated data packet has a header for identifying the contents of the aggregated packets).

**Regarding claim 24**, Ketcham teaches a master station for a communications system having a frame-oriented transmission of data packets of differing capacity between the master station and subscribers, the master station allocating communications resources in a form of data packets for the subscribers, the subscribers requesting the communications resources from the master station (Abstract), the master station comprising:

a frame generator configured to predefine a transmission frame (Figures 5 – 7);

a multiplexer configured to insert control data packets and user data packets into the predefined transmission frame (Column 2, lines 61 – 67), a data capacity of the user

data packets being a multiple of a data capacity of the control data packets (Column 2, lines 62 – 67, where there are packets and they can be multiply fit into a maximum packet size; Column 10, lines 1 – 4, an Nth multiple);

a selection unit configured to determine, based on an agreement between the master station and at least one of the subscribers, whether containers for user data packets within the transmission frame are filled with control data packets (Column 3, lines 14 – 21; lines 1 – 6); and

a de-multiplexer configured to separate user data packets and control data packets transmitted in a transmission frame and configured to send the separated user data packets and control data packets to the selection unit (Column 8, lines 19 – 22).

Regarding claim 25, Ketcham teaches a subscriber device for a communications system having frame-oriented transmission of data packets of differing capacity between a master station and subscribes, the master station allocating communications resources in a form of data packets for the subscribers, the subscribers requesting the communications resources from the master station (Abstract), the describer device comprising:

a de-multiplexer configured to separate user data packets and control data packets from a transmission frame transmitted by the master station and configured to send the separated user data packets and control data packets to an analyzer unit (Column 7, lines 53 – 57);

a multiplexer configured to insert subscriber-side control data packets and user data packets into a transmission frame predefined by the master station, the user data

packets having a data capacity that is a multiple of a data capacity of the control data packets (Column 2, lines 62 – 67, where there are packets and they can be multiply fit into a maximum packet size; Column 10, lines 1 – 4, an Nth multiple); and

a selecting unit configured to determined whether containers for user data packets are filled with a plurality of control data packets within the transmission frame based on an agreement between the master station and the subscriber device (Column 3, lines 14 – 21; lines 1 – 6).

### ***Response to Arguments***

Applicant's arguments filed March 20, 2006 have been fully considered but they are not persuasive.

The applicant argues that the reference, Ketcham, does not disclose filling user packets with control packets, an determining agreement between the master station and at least one subscribers before which containers can be filled with control packets, combining control packets in a subframe, whose external format is that of user packets.

The examiner disagrees, regarding the applicant's argument that Ketcham does not teach filling user packets with control packets, Ketcham discloses filling aggregate packets which can be considered user packets or any type of packet (Column 2, lines 61 – 67) with different types of packets including control packets (Figure 4, element 124), the idea of a user packet can describe any type of packet, so the reference teaches combining packets into a container or frame that gets sent over a network, which meets the limitation of filling a user packet with control packets and sending them over the network.



Regarding the idea of the master station checking an agreement between network nodes about sending packets filled with control packets, Ketcham teaches that station first checks if the creation and sending of aggregate packets is valid between certain nodes (Column 4, lines 37 – 63), this shows that the master subscriber checks to see if the node can accept that certain type of packets, or whether single nodes have been given the ability to send and accept these aggregate packets, this is the same as agreeing on the ability to send these packets and setting up a connection between two router which have the ability and knowledge how to handle these packets, those router have agreed on the standard of transmission of aggregating and de-aggregating packets.

Regarding the idea that the system does not combine subframes into an external format which is the format of the user packet, Ketcham discloses a format for combining different type of packets including control packets into an aggregate packet which is considered one complete packet while being transported over the network (Figure 7), which shows that there are subframes combined into the container.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Bates whose telephone number is (571) 272-3980. The examiner can normally be reached on 8 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KB

KB  
April 17, 2006

  
SALEH NAJJAR  
SUPERVISORY PATENT EXAMINER